

### **REMARKS**

By this amendment, claims 1, 6, 8, 9, 12, and 18 have been amended. Accordingly, claims 1-23 are currently pending in the application, of which claims 1, 6, 12, and 18 are independent claims. Claims 8 and 9 are amended to simply correct the grammatical errors.

Applicant respectfully submits that the above amendment does not add new matter to the application and are fully supported by the specification. In view of the above amendments and the following Remarks, Applicant respectfully requests reconsideration and timely withdrawal of the pending objections and rejections for the reasons discussed below.

### **REJECTIONS OF CLAIMS 1, 2, 5-7, AND 10 UNDER 35 U.S.C. 103(a)**

On page 2 of the Office Action, the Examiner rejected claims 1, 2, 5-7, and 10 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Okamoto et al., U.S. Patent No. 5,825,445 (hereinafter "Okamoto") in view of Wen et al., U.S. Patent No. 6,208,401 (hereinafter "Wen"). Applicants traverse the rejection with respect to these claims.

Claim 1 of the present application, as amended, recites: "A liquid crystal display, comprising ... spacers positioned between the upper substrate and the lower substrate and within a pixel region, ... and the color of the spacers is black."

Independent claim 1 of the present application patentably distinguishes over the combination of Okamoto and Wen for at least the foregoing reasons. The Examiner admits that Okamoto fails to teach spacers positioned between the upper and the lower substrate and asserts that Wen teaches "a black spacer to avoid light dispersion and provide spacing between the substrates." However, the black spacers disclosed in Wen are not the same as the spacers recited in claim 1 of the present application. Specifically, in Wen, the black spacers are positioned outside of the pixel region and are defined by a region contained by the

black matrix. Wen, column 3, lines 6-15 and 40-62, FIG 3 and FIG. 5. To the contrary, the spacers of the present application, as recited in independent claim 1, are positioned “within a pixel region.”

Therefore, for at least the reasons discussed above, independent claim 1 of the present application patentably distinguishes over the combination of Okamoto and Wen. Accordingly, it is respectfully requested that the rejection of independent claim 1 be withdrawn.

Claims 2 and 5 depend from independent claim 1 and are patentable for at least the reasons discussed above. Accordingly, it is respectfully requested that the rejections of claims 2 and 5 be withdrawn.

Similarly, independent claim 6 of the present application, as amended, recites: “A liquid crystal display, comprising ... spacers positioned between the upper substrate and the lower substrate and within a pixel region ... the spacers are black.”

Independent claim 6 of the present application patentably distinguishes over the combination of Okamoto and Wen for at least the foregoing reasons. The Examiner admits that Okamoto fails to teach spacers positioned between the upper and the lower substrate and asserts that Wen teaches “a black spacer to avoid light dispersion and provide spacing between the substrates.” However, the black spacers disclosed in Wen are not the same as the spacers recited in claim 6 of the present application. Specifically, in Wen, the black spacers are positioned outside of the pixel region and are defined by a region contained by the black matrix. Wen, column 3, lines 6-15 and 40-62, FIG. 3 and FIG. 5. To the contrary, the spacers of the present application, as recited in independent claim 6, are positioned “within a pixel region.”

Therefore, for at least the reasons discussed above, independent claim 6 of the present application patentably distinguishes over the combination of Okamoto and Wen.

Accordingly, it is respectfully requested that the rejection of independent claim 6 be withdrawn.

Claims 7 and 10 depend from independent claim 6 and are patentable for at least the reasons discussed above. Accordingly, it is respectfully requested that the rejections of claims 7 and 10 be withdrawn.

**REJECTIONS OF CLAIMS 12, 13 AND 16 UNDER 35 U.S.C. 103(a)**

On page 3 of the Office Action, the Examiner rejected claims 12, 13, and 16 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Okamoto in view of Wen and further in view of Watanabe, U.S. Patent No. 5,617,228. Applicants traverse the rejection with respect to these claims.

Independent claim 12 of the present application, as amended, recites: “A liquid crystal display, comprising ... spacers positioned between the upper substrate and the lower substrate and within a pixel region ...”

Independent claim 12 of the present application patentably distinguishes over the combination of Okamoto, Wen, and Watanabe for at least the foregoing reasons. The Examiner admits that Okamoto fails to teach spacers positioned between the upper and the lower substrate and asserts that Wen teaches “a black spacer to avoid light dispersion and provide spacing between the substrates.” However, the black spacers disclosed in Wen are not the same as the spacers recited in claim 12 of the present application. Specifically, in Wen, the black spacers are positioned outside of the pixel region and are defined by a region contained by the black matrix. Wen, column 3, lines 6-15 and 40-62, FIG. 3 and FIG. 5. To the contrary, the spacers of the present application, as recited in independent claim 12, are positioned “within a pixel region.” Watanabe does not cure the deficiency of Okamoto and Wen.

Therefore, for at least the reasons discussed above, independent claim 12 of the present application patentably distinguishes over the combination of Okamoto, Wen, and Watanabe. Accordingly, it is respectfully requested that the rejection of independent claim 12 be withdrawn.

Claims 13 and 16 depend from independent claim 12 and are patentable for at least the reasons discussed above. Accordingly, it is respectfully requested that the rejections of claims 13 and 16 be withdrawn.

**REJECTIONS OF CLAIMS 18, 19 AND 22 UNDER 35 U.S.C. 103(a)**

On page 4 of the Office Action, the Examiner rejected claims 18, 19 and 22 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Okamoto in view of Wen and further in view of Watanabe. Applicants traverse the rejection with respect to these claims.

Independent claim 18 of the present application, as amended, recites: “A liquid crystal display, comprising ... spacers positioned between the upper substrate and the lower substrate and within a pixel region ...”

Independent claim 18 of the present application patentably distinguishes over the combination of Okamoto, Wen, and Watanabe for at least the foregoing reasons. The Examiner admits that Okamoto fails to teach spacers positioned between the upper and the lower substrate and asserts that Wen teaches “a black spacer to avoid light dispersion and provide spacing between the substrates.” However, the black spacers disclosed in Wen are not the same as the spacers recited in claim 12 of the present application. Specifically, in Wen, the black spacers are positioned outside of the pixel region and are defined by a region contained by the black matrix. Wen, column 3, lines 6-15 and 40-62, FIG. 3 and FIG. 5. To the contrary, the spacers of the present application, as recited in independent claim 12, are

positioned “within a pixel region.” Watanabe does not cure the deficiency of Okamoto and Wen.

Therefore, for at least the reasons discussed above, independent claim 18 of the present application patentably distinguishes over the combination of Okamoto, Wen, and Watanabe. Accordingly, it is respectfully requested that the rejection of independent claim 18 be withdrawn.

Claims 19 and 22 depend from independent claim 12 and are patentable for at least the reasons discussed above. Accordingly, it is respectfully requested that the rejections of claims 19 and 22 be withdrawn.

**REJECTIONS OF CLAIMS 3, 4, 8 AND 9 UNDER 35 U.S.C. 103(a)**

On page 5 of the Office Action, the Examiner rejected claims 3, 4, 8 and 9 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Okamoto in view of Wen and further in view of Miller et al., U.S. Patent No. 5,617,228 (hereinafter, “Miller”). Applicants traverse the rejection with respect to these claims.

Claims 3 and 4 depend from independent claim 1 and are patentable for at least the reasons discussed above that independent claim 1 patentably distinguishes over the references relied upon by the Examiner. Miller does not cure the deficiencies. Accordingly, it is respectfully requested that the rejections of claim 3 and 4 be withdrawn.

Claims 8 and 9 depend from independent claim 6 and are patentable for at least the reasons discussed above that independent claim 6 patentably distinguishes over the references relied upon by the Examiner. Accordingly, it is respectfully requested that the rejections of claims 8 and 9 be withdrawn.

**REJECTIONS OF CLAIMS 14 AND 15 UNDER 35 U.S.C. 103(a)**

On page 6 of the Office Action, the Examiner rejected claims 14 and 15 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Okamoto in view of Watanabe and further in view of Miller. Applicants traverse the rejection with respect to these claims.

Claims 14 and 15 depend from independent claim 12 and are patentable for at least the reasons discussed above that independent claim 12 patentably distinguishes over the references relied upon by the Examiner. Miller does not cure the deficiencies. Accordingly, it is respectfully requested that the rejections of claims 14 and 15 be withdrawn.

**REJECTIONS OF CLAIMS 20 AND 21 UNDER 35 U.S.C. 103(a)**

On page 6 of the Office Action, the Examiner rejected claims 20 and 21 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Okamoto in view of Wen and further in view of Watanabe. Applicants traverse the rejection with respect to these claims.

Claims 20 and 21 depend from independent claim 18 and are patentable for at least the reasons discussed above that independent claim 18 patentably distinguishes over the references relied upon by the Examiner. Watanabe does not cure this deficiency. Accordingly, it is respectfully requested that the rejections of claims 20 and 21 be withdrawn.

**REJECTION OF CLAIM 11 UNDER 35 U.S.C. 103(a)**

On page 7 of the Office Action, the Examiner rejected claim 11 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Okamoto in view of Wen and further in view of Bos, U.S. Patent No. 5,410,422. Applicants traverse the rejection with respect to these claims.

Claim 11 depends from independent claim 6 and is patentable for at least the reasons discussed above that independent claim 6 patentably distinguishes over the references relied upon by the Examiner. Box does not the deficiency. Accordingly, it is respectfully requested

that the rejections of claim 11 be withdrawn.

**REJECTION OF CLAIM 17 UNDER 35 U.S.C. 103(a)**

On page 7 of the Office Action, the Examiner rejected claim 17 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Okamoto, Wen, Watanabe, and Bos. Applicants traverse the rejection with respect to these claims.

Claim 17 depends from independent claim 12 and is patentable for at least the reasons discussed above that independent claim 12 patentably distinguishes over the references relied upon by the Examiner. Accordingly, it is respectfully requested that the rejections of claim 17 be withdrawn.

**REJECTION OF CLAIM 23 UNDER 35 U.S.C. 103(a)**

On page 8 of the Office Action, the Examiner rejected claim 23 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Okamoto and Watanabe in view of Bos. Applicants traverse the rejection with respect to these claims.

Claim 23 depends from independent claim 18 and is patentable for at least the reasons discussed above that independent claim 18 patentably distinguishes over the references relied upon by the Examiner. Accordingly, it is respectfully requested that the rejections of claim 23 be withdrawn.


**CONCLUSION**

Applicants believe that a full and complete response has been made to the pending Office Action and respectfully submit that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicants respectfully submit that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicants' undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

  
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